

# Charting a New Direction for North Carolina

## NCDOT Statewide Transportation Plan



**NC Executive Committee for Highway Safety  
January 2005**



# Statewide Transportation Plan - Background & Purpose -

- Develop Policy Guidance & Strategic Direction for NCDOT
- Federally Mandated (ISTEA & TEA-21)
- 2000 Transportation Finance Commission recommendation -- Efficiency Study # 8
- Inventory 25-year Needs
- Forecast Available Revenues
- Solicit Public & Stakeholder Interest
- Determine long-term Investment Priorities



# Statewide Transportation Plan

## - Who has been involved? -

- Board of Transportation
  - Statewide Plan Committee
- Senior NCDOT Management
- Technical Steering Committee (all modes)
- Division Engineers
- Stakeholder Groups / Citizens
  - Regional Forums / Newsletters / Outreach Events / Website
- Transportation Planning Branch Staff
  - Consultant Team

# Statewide Transportation Plan

## - Key Issues -

- \$84 Billion in Needs vs. \$55 Billion in Revenue
- Limited ability to address pressing needs
  - spending restrictions on state/federal dollars
  - flexibility is essential
- Maintenance Backlog
  - 4K miles of state highways & 260 bridges added each yr
- Demographic/Travel Trends
  - 1990-2000 - population increased 21%; VMT increased nearly 40%
  - By 2020 population expands additional 25%

# Statewide Transportation Plan

## - Key Issues con't-

- Regional Differences and Needs
- Quality of life goals
  - air quality, environmental & community enhancement
- Lack of Performance Measuring
  - need goals, tracking systems, reporting mechanisms
- Department must Prioritize w/ Limited Resources
  - *NCDOT cannot be all things to all people*



# Statewide Transportation Plan

## - What North Carolinians said -

- More emphasis on having a modern, well-maintained system
- Willing to pay for smart, efficient, effective transportation improvements
- Quality transportation and an enhanced environment are paramount
- Assure economic competitiveness and balance
- Provide more transportation options



# Statewide Transportation Plan

## - How were the needs quantified? -

- Highways & Bridges
  - HPMS - Highway Performance Monitoring System
  - BNIP - Bridge Needs & Investment Process
  - Maintenance Condition Assessment Report
- Non-hwy Modes
  - Source documentation (ex. Transit 2001, NC Rail Plan)
  - Significant staff input
- System-oriented analysis; not project/geographic specific



# Statewide Transportation Plan

## - Needs per Mode -

**\$84 Billion** (all modes; \$2001)

- 25-year “snapshot”
  - Highways & Bridges - \$66.6 billion
  - ITS (Intelligent Transportation Systems) - \$1.1 billion
  - Public Transportation - \$10.6 billion
  - Rail (Passenger & Freight) - \$4 billion
  - Ferry - \$1.1 billion
  - Bicycle / Pedestrian - \$300 million
  - Aviation - \$1 billion\*

*\* funding is self-contained; not in final scenario*





# Statewide Transportation Plan

## - How were the needs illustrated? -

### *Improvement/Investment Categories*

- **Maintenance / Preservation** - routine treatments that *restore* to adequate level or *sustain* the condition of an asset & activities / treatments that *protect* the infrastructure and *extend* service life
- **Modernization** - *upgrades* to system safety, functionality, & operational efficiency w/o adding physical capacity
- **Expansion** - *new* construction/*new* services (beyond existing) and/or physically expanding capacity to an existing facility

# Statewide Transportation Plan

## - Safety Related Needs -

- \$5.3 Billion annual cost to NC motorists
- NC's traffic fatality rate is 13% higher than national average
- 32,000 miles of deficient pavement (40% of the system)
- 7,000 state bridges structurally deficient
- 8,800 miles--narrow lanes & shoulders; sharp curves
- Future needs almost uniformly split b/w: Expansion  
Maintenance/Pres. & Modernization
  - Future maintenance/preservation needs (over the next 25 year) expected to be almost \$25 billion
  - Future modernization needs (over the next 25 years) expected to be almost \$20 billion



# Statewide Transportation Plan

## - Revenue Forecast -

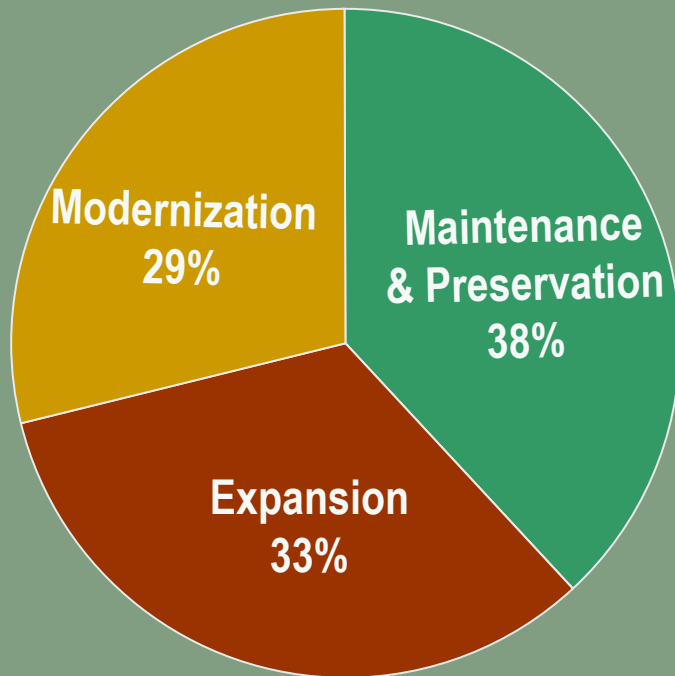
- **\$55 Billion**
- Assumptions made:
  - **No new** revenue sources over 25-years
  - Con't growth of state user fee "transfers"
  - Increases in fed/state funding at a conservative rate
  - Based on historical patterns; input from state office of planning and budget
  - Inflation assumed but discounted back to 2001 \$



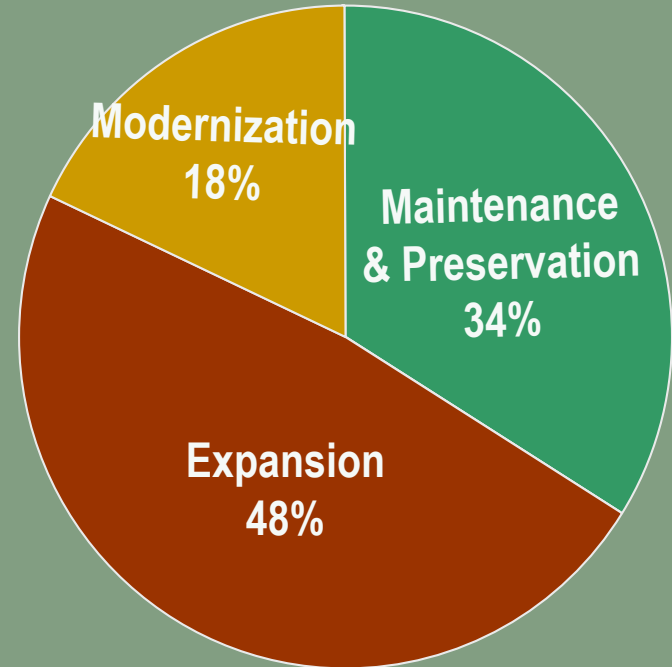


# How Do NC Highway Needs Compare with Recent Highway Investment?

25-Year Highway Needs



1995-2000 Highway Investment



# Statewide Transportation Plan

## - Determining a Direction -

Revenue = \$55 Billion

Needs = \$84 Billion



# Statewide Transportation Plan

## - What is an Investment Scenario? -

- Long-range Statewide Investment Strategy
  - program / capital goals
  - allocation of expected \$ within categories
  - financial framework; points to emphasis areas
- Fiscally constrained
- Investments reflect priorities
- Trade-offs (can retire only 2/3 of needs)





# Statewide Transportation Plan

## - Scenarios Considered -

- Modal Choice / Highway Preservation

- Large increase for non-highway modes
- Trade-offs: Hwy. Expansion and Modernization



- Statewide Facilities / Highway Expansion

- Large increase in meeting Statewide travel needs
- Most Hwy. Expansion needs met



- Modernization First

- Majority of major Modernization needs met
- Trade-offs: highway expansion, preservation



# Statewide Transportation Plan - Recommended Scenario -

## A new Investment Direction:

- Underscores importance of Safety in all investments
- Creates a focus on preserving/upgrading the EXISTING transportation system
- Targets investment in statewide mobility
- Extends intent & emphasizes of *Moving Ahead!*
- Creates more transportation options
- Only addresses 2/3 of all projected needs



# Statewide Transportation Plan - Recommended Scenario -

## Specifics - page 20 & 21 in Plan Report

- 75% of Maintenance & Preservation needs met
  - **\$22.6B = 10% increase from past**
- 65% of Modernization needs met
  - **\$15.6B = nearly 25% increase from past**





# Modernization improvement - BEFORE



# Modernization improvement - AFTER



# Statewide Transportation Plan

## - Recommended Scenario -

### Specifics - page 20 & 21 in Plan Report

- 75% of Maintenance & Preservation needs met
  - **represents 10% increase from past**
- Major Modernization emphasis (2/3 of needs met)
  - **represents nearly 25% increase from past**
- 2/3 of Highway Expansion needs met
- Increases investment in non-hwy modes (7% to 17%)



# Statewide Transportation Plan - Implementation -

- 2 Implementation Leadership Teams
  - Senior Management & BOT Statewide Plan Committee
- Pursue Greater Flexibility in Transportation Funding
- Improve Project Selection Process
- Monitor & Report Progress
- Establish Revision Cycles
- Implement Strategic Highway Corridors Concept
  - First tangible Action Item





# ***What are Strategic Highway Corridors?***

*"A set of Existing Highways Vital to Moving People and Goods within and just outside North Carolina"*

# ***SHC Goals***

## ➤ Efficient, safer, & improved mobility between Activity Centers:

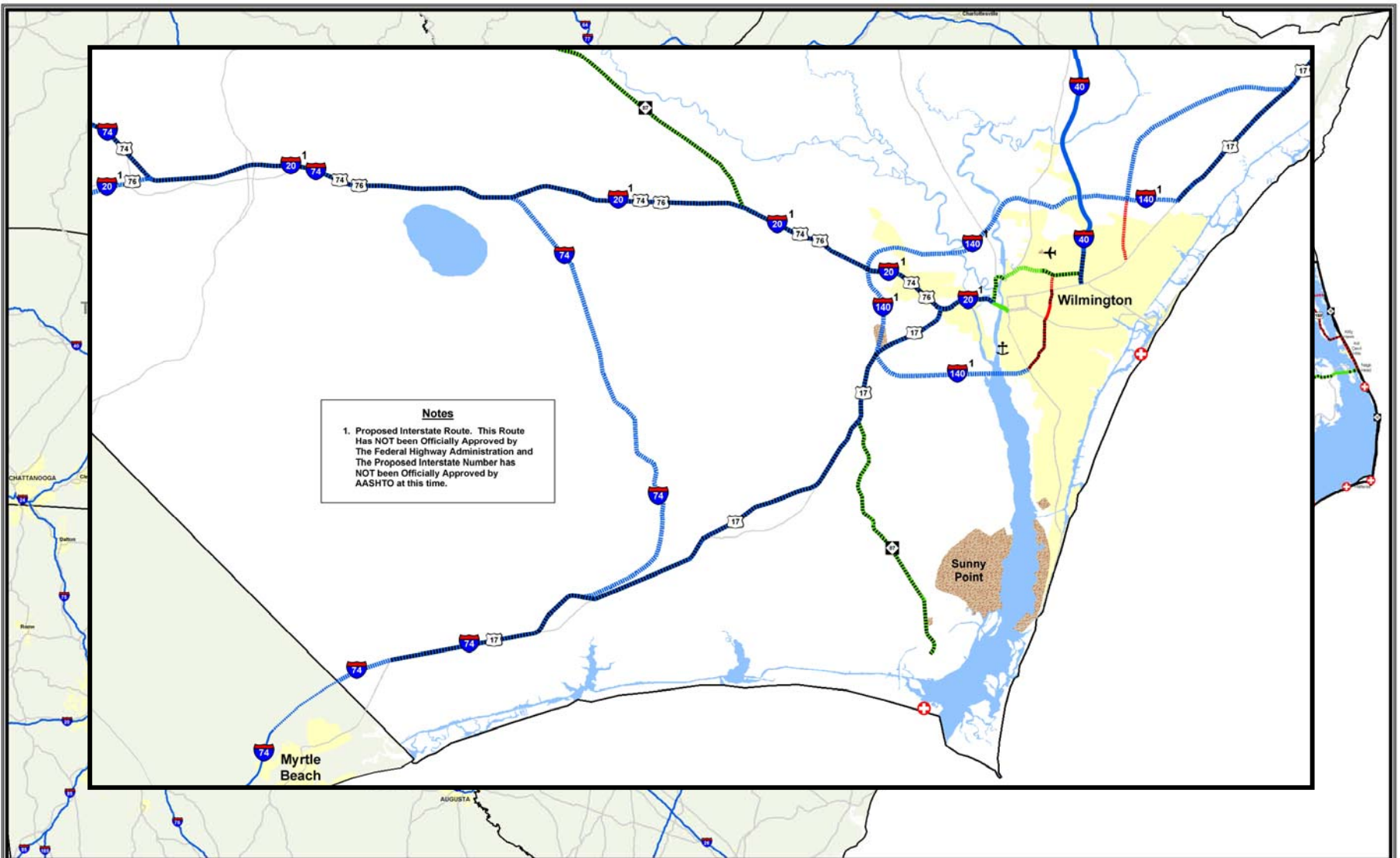
- Urban Areas with a Population of 20,000 or greater
- State Ports
- Major Military Bases
- Major Intermodal Terminals
- University of North Carolina System Campuses
- Major Hospitals/Trauma Centers
- Major Tourist Attractions

# ***SHC Goals***

- **Create Broad based Vision for each Corridor**
- **Affect Long-Term Decision Making**
  - Systems Planning
  - Funding Decisions
  - Project Planning Decisions
  - Design Decisions
  - Day to Day Decisions (ex: Driveway Permits)
  - Local Land Use Decisions



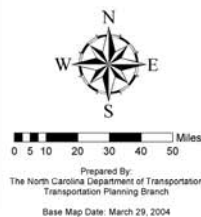




## Vision Plan

Adopted by The North Carolina Board of Transportation

Plan Date: September 2, 2004



Legend	
<b>Freeways</b>	<b>Boulevards</b>
Existing	Existing
Needs Upgrade	Needs Upgrade
Recommended	Recommended
<b>Expressways</b>	<b>Thoroughfares</b>
Existing	Existing
Needs Upgrade	Needs Upgrade
Recommended	Recommended
US/Other Route	State Port
Major Airport	Intermodal Connector
Coast Guard Station	Major Military Base
Urban Area	Water Features





north carolina department of transportation

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- Maps & Presentations
- Corridor Studies
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- FAQ
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- Statewide Transportation Plan

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## Strategic Highway Corridors



The Strategic Highway Corridors (SHC) concept is an exciting initiative to protect the mobility function of critical highway facilities. The concept provides an opportunity for NCDOT and its stakeholders to consider long-term vision, consistency in decision-making, land use partnerships, overarching design, and operational changes on key routes across the state. The SHC concept articulates a new planning direction for North Carolina, providing a tool for NCDOT to protect critical facilities and avoid short-sighted decision-making.

The SHC concept is still under development so please check back periodically for updates.



The North Carolina  
[Department of Transportation](#)  
[Transportation Planning Branch](#)


<http://www.ncdot.org/planning/tpb/shc/>

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NORTH CAROLINA'S  
**Long-Range Statewide  
Multimodal Transportation Plan**


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## Statewide Transportation Plan

 Download **"Charting a New Direction for NCDOT"** (4.5MB)  
North Carolina's Long-Range Statewide Multimodal Transportation Plan

 Download **"Frequently Asked Questions"** (16KB)  
What is the purpose of the Plan? How was the Plan developed?


 Download the press release **"Board of Transportation Approves 25-year Plan"** (16KB)  
Emphasizing greater investment in highway maintenance, modernization and other transportation modes

North Carolina's new **Long-Range Statewide Multimodal Transportation Plan** (hereafter referred to as the Statewide Transportation Plan) stakes out a bold, ambitious course of action for NCDOT. It also reflects a greatly enhanced focus on providing and supporting a truly modern, well-maintained, and multimodal transportation system. The updated Statewide Transportation Plan is an important first step in charting a new direction for NCDOT and the State. It not only recommends a new, 25-year investment strategy that embraces all modes, it also introduces a new planning framework that is inclusive, technically sound, and reflects financial realities.

The new Statewide Transportation Plan is the product of an intensive, three-year planning process that included technical analysis, public outreach, and strategic planning. The centerpiece of the Statewide Transportation Plan is the Recommended Investment Scenario - a strategy that proposes targeted levels of funding within major transportation categories. This strategy will serve as a policy guideline to support future investment decision-making. A few important caveats should be noted about the Recommended Investment Scenario:

- It is not a remedy to fix all of the State's transportation challenges; it identifies a funding gap that leaves nearly one-third of all needs unmet if no additional revenues are obtained.

### Need Acrobat?



[Download It Here](#)

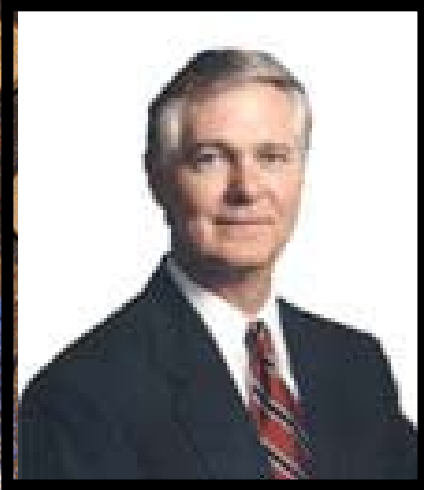
<http://www.ncdot.org/planning/statewideplan>



# Statewide Transportation Plan - Summary -

- Plan is a long-term Investment Blueprint
  - visionary; overarching policy for capital investment
- Only meets 2/3 of all projected needs
- Underscores the need for investment flexibility & maximizing the use of existing resources
- Plan is a “living document” -- updated every 4 years
- Implementation is the KEY!
  - Series of Action items must be sustained to achieve goals





*“Our transportation investments have not kept pace – leading to an outdated and poorly maintained system. The current condition of roads and bridges, as well as our lack of public transportation options, will not support the vision of progress and quality of life we want for One North Carolina.”*

– Governor Mike Easley

**NC Executive Committee for Highway Safety  
January 2005**



A collection of military medals and a compass are arranged on a wooden surface. In the top left, a red ribbon with a circular medal is visible. Below it, a blue ribbon with a circular medal is shown. A large, ornate silver star medal with a central emblem is prominently displayed. A pair of thin-framed glasses lies diagonally across the lower half of the image. In the bottom left corner, a round compass with a white face and black markings is visible. The background is a light-colored, textured surface.

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# Statewide Transportation Plan

## - Final Thoughts -

